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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SALCE, JASON P

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 02/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary

Application No.

09/736,393

Applicant(s)

AUGENBRAUN ET AL.

Examiner

Jason P Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 and 29-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 21-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 7
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. On a telephonic interview conducted on 1/12/04, an agreement was reached that the restriction was in error. Therefore, the examiner has provided a new restriction.

Examiner also thanks applicant's representative for further election of Group I (claims 1-9 and 21-28).

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9 and 21-28 are drawn to a system for broadcasting information from a headend to a client, classified in class 725, subclass 98.
- II. Claims 10-20 and 29-30 are drawn to a receiver for receiving broadcast information, classified in class 725, subclass 100.
- III. Claims 31-38 are drawn to a cable television headend delivering broadcast data to a client, classified in class 725, subclass 91.

3. The inventions are distinct, each from the other because:

Inventions I through III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention I has separate utility such as cable television programming delivery system for providing television channels to a viewer at the customer premise. See MPEP § 806.05(d).

Invention II has separate utility such as a set-top box for use in a TV network. See MPEP § 806.05(d).

Invention III has separate utility such as cable television headend for use in a TV network, which can transmit video to a client. See MPEP § 806.05(d).

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for reexamination purposes as indicated is proper.

5. During a telephone conversation with William Blake on 1/12/04 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-9 and 21-28. Affirmation of this election must be made by applicant replying to this Office action. Claims 10-20 and 29-38 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "18" has been used to designate both the connection between set top converter box 14 and monitor 20 and the local database. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 5, 9, 21-22, 24 and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Smith et al. (U.S. Patent No. 5,754,940).

Referring to claim 1, Smith discloses a network headend (see Column 3, Lines 33-37 and Figure 1) for accessing information from one or more sources (see Column 3, Lines 49-65 for accessing a cable and satellite source), and broadcasting said information (see element 6 in Figure 1 for broadcasting this information to a client receiver).

Smith also discloses a plurality of downstream channels interfaced to said headend for transmitting information (note that a coaxial cable link 6 (see Figure 1) inherently comprises a number of channels to broadcast a multitude of television programs). Also note Column 4, Lines 44-56 for transmitting additional data in a horizontal or vertical blanking interval, which also constitutes as other downstream channels.

Smith also discloses a plurality of terminal devices for receiving said downstream channels (see elements 7, 8 and 9 in Figure 1 and Column 3, Lines 49-53 for receiving channels from a source).

Smith also discloses that a terminal device contains:

- 1) a tuner for receiving and selecting said downstream channels (see Column 6, Lines 60-63 for tuning a channel to the desired frequency).

- 2) a terminal processor for receiving channel selection and information requests from a user, and instructing said tuner to select one of said downstream channels, said terminal processor including programming for receiving an information

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request from a user, and in response thereto, instructing said tuner to select one of said downstream channels on which said requested information is being transmitted from said headend (again, see Column 6, Lines 60-67 and Column 7, Lines 1-6 for a channel selection, also note that this selection can also result in an information request (a screen to be displayed) for checking out of a hotel room).

Referring to claim 2, Smith discloses that said terminal device further includes a memory containing a channel mapping database for identifying, for each of a plurality of possible information requests received by a user, a one of said channels on which said requested information is being transmitted from said headend (see again Column 6, Lines 60-63, which contains a channel map stored in RAM 217 and determines which channel is a television program and which channel is the channel to present a screen to the user in order to provide information requests).

Referring to claim 5, Smith discloses that the terminal device contains a memory for storing the information data streams (see Column 6, Lines 10-12 for storing a screen in RAM 217 of Figure 2), and a display manager for formatting said information for display on a video monitor interfaced to said terminal device (see character generator 204 at Column 4, Lines 20-23 and Column 5, Lines 22-27).

Referring to claim 9, Smith discloses including an input device for entering information requests into the terminal processor through an actuation of a button on said input device (see Column 6, Lines 60-63).

Referring to claim 21, see rejection of claims 1, 5 and 9.

Referring to claim 22, see rejection of claim 2.

Referring to claim 24, Smith discloses storing said requested information in memory in a terminal device (see Column 6, Lines 10-12).

Referring to claim 28, see rejection of claim 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-4 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (U.S. Patent No. 6,195,530) in view of Rothblatt (U.S. Patent No. 6,105,060) in further view of Etheredge (U.S. Patent No. 5,990,890).

Referring to claim 3, Smith discloses all of the limitations in claim 2, but fails to teach a multiplexer and identifying a time slot in a multiple time slot sequence when each of said information data streams is to be transmitted. Smith does however teach a channel-mapping database (see rejection of claim 2) and that the information data streams (screens) contain information identified by a corresponding one of said plurality of information requests (for example requesting to check out of a room at Column 7, Lines 1-6). Rothblatt teaches multiplexing a plurality of information data streams on one of said downstream channels (see Column 12, Lines 40-54). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the headend of Smith, to include the multiplexer, as taught by Rothblatt, for the purpose

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of allowing for a user to access low rate video, paging, mailing, fax, use of flat display screens, or a serial data interface (see Column 12, Lines 46-49 of Rothblatt).

Further, Smith and Rothblatt fail to disclose that said channel-mapping database further includes timing information identifying a time slot in a multiple time slot sequence when each of said information data streams is to be transmitted. Etheredge discloses storing a parameter in memory at a receiver (channel mapping database) that defines when television program listings information is to be updated (see Column 6, Lines 8-34 and Column 9, Lines 38-67). Also note that at Column 9, Lines 60-67, Etheredge specifically states that this timing information identifies a time slot (when to update the EPG) in a multiple time slot sequence (the interval in how often the program guide information should be updated). At the time the invention was made, it would have been obvious to modify the system of Smith and Rothblatt (specifically the receiver), to store in memory a parameter for instructing the headend when to send updated EPG information, as taught by Etheredge, for the purpose of routinely keeping the databases (memory) in the receiver up to date (see Column 9, Lines 60-61 of Etheredge).

Claim 4 corresponds to claim 3, where Etheredge teaches the additional limitation of the terminal processor is further programmed to identify from the channel mapping database, a time at which said one of said information data streams containing said requested information is to be transmitted on said one of said downstream channels (see again, the rejection of claim 3). Smith still teaches the limitation of instructing a tuner to select said one of said downstream channels at said time (see

Smith requiring the tuner to tune to a specified channel to download the updated screens (EPG)).

Referring to claim 23, see rejection of claim 4.

9. Claims 6, 8, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (U.S. Patent No. 6,195,530) in view of Schein et al. (U.S. Patent No. 6,002,394).

Referring to claim 6, Smith teaches all of the limitations in claim 5, but fails to teach a PIP application for simultaneously displaying first information stored in said memory, and second information being received on one of the downstream channels. Schein discloses an application (program guide application) that displays a PIP window 526 for displaying information received from a downstream channel (a TV broadcast) and first information stored in memory (EPG data in window 506) (see Figure 16A and Column 21, Lines 51-65 and Column 22, Lines 1-9). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the display of Smith, using the application for displaying screens and programs to a TV screen, as taught by Schein, for the purpose of enabling a user to quickly and efficiently browse through the television schedule, and to interact with a wide range of services that are related to the programs in the TV schedule (see Column 21, Lines 15-17 of Schein).

Referring to claim 8, Smith discloses all of the limitations in claim 1, but fails to disclose providing web page content that is related to a video program that is being received by the tuner at a time said information request is received by the terminal

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processor. Schein discloses accessing web pages related to television programming upon request (see Column 18, Lines 44-67). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the screens of Smith, using the application to provide access to web pages over an Internet network, as taught by Schein, for the purpose of enabling a user to quickly and efficiently browse through the television schedule, and to interact with a wide range of services that are related to the programs in the TV schedule (see Column 21, Lines 15-17 of Schein).

Referring to claim 25, see rejection of claim 6. Also note Schein teaches that the information in the PIP window 526 only changes when a user selects something in the program matrix window 506 (see again Column 21, Lines 51-65 and Column 22, Lines 1-9), which is downloaded from a headend (see Column 7, Lines 2-7).

Referring to claim 27, see rejection of claim 8.

10. Claims 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (U.S. Patent No. 6,195,530) in view of Gordon et al. (U.S. Patent No. 6,621,870).

Referring to claim 7, Smith discloses all of the limitations in claim 1, as well as the headend further including an encoder for digitally encoding information data streams to be broadcast and said terminal device further includes a decoder for decoding said information data streams (see video modulator 5 in Figure 1 for the encoder and demodulator 202 in Figure 2 for the decoder), but fails to teach the encoder being programmed to generate a full image frame periodically to facilitate synchronization of said decoder with said encoder data stream. Gordon discloses using

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a reference frame to transition from screen to screen and provide synchronization between the encoder and decoder (see Column 3, Lines 1-24). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the encoder and decoder, as taught by Smith, using the encoder and decoder, as taught by Gordon, for the purpose of making the transition from screen to screen seamless (see Column 3, Lines 23-24 of Gordon).

Referring to claim 26, see rejection of claim 7.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barker (U.S. Patent No. 6,141,682) discloses requesting (from a set top box) programming from a headend.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5359.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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January 20, 2004


HAITRAN
PATENT EXAMINER